



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

| | | | | |
|----------------------------|-------------|----------------------|---------------------|------------------|
| APPLICATION NO. | FILING DATE | FIRST NAMED INVENTOR | ATTORNEY DOCKET NO. | CONFIRMATION NO. |
| 10/788,487 | 03/01/2004 | Katsuya Kitamori | 1614.1389 | 7542 |
| 21171 | 7590 | 12/28/2009 | EXAMINER | |
| STAAS & HALSEY LLP | | | MURPHY, RHONDA L | |
| SUITE 700 | | | ART UNIT | PAPER NUMBER |
| 1201 NEW YORK AVENUE, N.W. | | | | 2462 |
| WASHINGTON, DC 20005 | | | MAIL DATE | DELIVERY MODE |
| | | | 12/28/2009 | PAPER |

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

| | | |
|------------------------------|--------------------------------------|--|
| Office Action Summary | Application No. 10/788,487 | Applicant(s) KITAMORI ET AL. |
| | Examiner RHONDA MURPHY | Art Unit 2462 |

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If no period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1) Responsive to communication(s) filed on 25 November 2009.
 2a) This action is FINAL. 2b) This action is non-final.
 3) Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4) Claim(s) 1,3,5-7,9,11 and 12 is/are pending in the application.
 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
 5) Claim(s) _____ is/are allowed.
 6) Claim(s) 1,3,5-7,9,11 and 12 is/are rejected.
 7) Claim(s) _____ is/are objected to.
 8) Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9) The specification is objected to by the Examiner.
 10) The drawing(s) filed on 01 March 2004 is/are: a) accepted or b) objected to by the Examiner.
 Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
 Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
 11) The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
 a) All b) Some * c) None of:
 1. Certified copies of the priority documents have been received.
 2. Certified copies of the priority documents have been received in Application No. _____.
 3. Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) Notice of References Cited (PTO-892)
 2) Notice of Draftsperson's Patent Drawing Review (PTO-948)
 3) Information Disclosure Statement(s) (PTO/SB/08)
 Paper No(s)/Mail Date _____

4) Interview Summary (PTO-413)
 Paper No(s)/Mail Date: _____
 5) Notice of Informal Patent Application
 6) Other: _____

DETAILED ACTION

Continued Examination Under 37 CFR 1.114

1. A request for continued examination under 37 CFR 1.114, including the fee set forth in 37 CFR 1.17(e), was filed in this application after final rejection. Since this application is eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(e) has been timely paid, the finality of the previous Office action has been withdrawn pursuant to 37 CFR 1.114. Applicant's submission filed on 11/25/09 has been entered.
2. Claims 2, 4, 8 and 10 were previously canceled and claims 1, 3, 5 -7, 9, 11 and 12 are currently pending.

Response to Arguments

3. Applicant's arguments with respect to claims 1 and 7 have been considered but are moot in view of the new ground(s) of rejection.
4. In addition, Applicant's arguments regarding Ong's teaching of "distributed schemes" and "failure to teach basic unit signals" have been fully considered but they are not persuasive. Applicant states "*Ong, to the contrary, teaches away from adding the identifier to concatenation setting information and sending this information, because Ong notes that such distributed schemes, in which the nodes of the ring intercommunicate, are not robust in that they do not take into account span failures and how to handle partially built rings. In particular, as described at column 4, lines 27-33...*" However, Examiner respectfully disagrees and would like to note that the above

passage is described in the background of the specification and has not been relied upon to make any claim rejections. Applicant also argues "*Neither Ong nor Gullicksen teaches, discloses, or suggests "the concatenation setting information is for connecting basic unit signals transmitted over the ring network," as recited in claims 1 and 7. The connection configuration of Ong, rather, identifies the usage of smaller sized components on a set of channels or for one or more STSs*". However, Examiner respectfully disagrees. Ong teaches in col. 7, lines 33-45, the invention operates on STS and concatenated STS size components....STS concatenation configuration for the set of channels not being limited to STS and concatenated STS. Ong's disclosure of the invention operating on STS and concatenated STS size components and also operating in smaller size components does not indicate the signals transmitted over the network are not basic unit signals. Thus, it is Examiner's position that the claim limitations have been met.

Claim Rejections - 35 USC § 103

1. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

2. This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein

were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a).

3. Claims 1, 3, 5 – 7, 9, 11 and 12 are rejected under 35 U.S.C. 103(a) as being unpatentable over Ong et al. (US 7,130,263) in view of Gullicksen et al. (US 6,751,189) and Ohira et al. (US 6,721,268).

Regarding claims 1 and 7, Ong teaches a transmission apparatus used for forming a ring network that supports a bidirectional ring switching capability (*Fig. 5*), the transmission apparatus comprising: a detecting part (*Fig. 6A, protection handler 665, located within each node*) for detecting a ring switching request from a received signal including identifiers of transmission apparatuses between which a failure occurs (*col. 12, lines 49-55; identifiers of transmission apparatus: col. 10, lines 19-31*), wherein the ring switching request is sent from one of the transmission apparatuses that detects the failure (*col. 9, lines 32-37*), and at least one of the transmission apparatuses performs line switching after receiving the ring switching request that goes around the ring network (*col. 9, lines 32-37*); a storing part (*protection units 650 and 655*) storing a concatenation setting information table that includes concatenation setting information for each identifier of transmission apparatuses forming the network (*Table 1; col. 12, lines 28-34*); an obtaining part (*protection group manager 630A*) obtaining an identifier from the ring switching request (*col. 10, lines 25-28, source and destination node*

information; further described in col. 12, lines 1-9) and concatenation setting information, corresponding to the identifier, from the concatenation setting information table (Table 1; col. 9, lines 58 to col. 10, lines 25; also described in col. 7, lines 33-40); and a setting part (traffic handler 670) making a concatenation setting for a protection line according to the concatenation setting information (col. 12, lines 54-63); a detecting part detecting a concatenation setting in the transmission apparatus (col. 12, lines 49-63); and a sending part (interface 610), sending the respective identifier of the transmission apparatus corresponding to the concatenation setting and sending the information to another transmission apparatus (col. 10, lines 19-39), wherein the concatenation setting information is for connecting basic unit signals transmitted over the ring network (col. 7, lines 33-45).

Ong fails to explicitly teach adding the respective identifier of the transmission apparatus to concatenation setting information and sending the concatenation setting information with the respective identifier to another transmission apparatus.

However, Gullicksen teaches adding the respective identifier of the transmission apparatus to concatenation setting information and sending the concatenation setting information with the respective identifier to another transmission apparatus (col. 9, lines 17-45: CSDP message including an ID and concatenation information; col. 9, lines 56-59 further describes distributing the information to each node).

In view of this, it would have been obvious to one skilled in the art to modify Ong's apparatus with Gullicksen's teaching of adding the identifier to concatenation setting information and sending this information, for the purpose of allowing each node

to update its table to accurately reflect the current characteristics of the ring in which the node is connected.

Although undefined regions in an overhead are well known in the art, Ong fails to explicitly disclose using available bits in an undefined region in an overhead of a signal transmitted over the ring network. However, Ohira teaches using available bits in an undefined region in an overhead of a signal transmitted over the ring network (col. 9, lines 43-49).

In view of this, it would have been obvious to one skilled in the art to modify Ong's system by using available bits in an overhead signal, for the purpose of including information in an available field of a frame and further transmitting the information within the frame.

Regarding claims 3 and 9, Ong teaches the transmission apparatus as claimed in claims 1 and 7, wherein the obtaining part obtains the concatenation setting information from information received from another transmission apparatus (col. 12, *lines 22-25; col. 10, lines 25-28*).

Regarding claims 5 and 11, the combined apparatus of Ong and Gullicksen teach the transmission apparatus as claimed in claims 1 and 7. Ong fails to explicitly disclose wherein, when the respective identifier is changed, the sending part adds the changed identifier to the concatenation setting information and sends the concatenation setting information with the changed identifier to another transmission apparatus.

However, Gullicksen further teaches wherein, when the respective identifier is changed, the sending part adds the changed identifier to the concatenation setting

information and sends the concatenation setting information with the changed identifier to another transmission apparatus (col. 9, lines 17-45).

In view of this, it would have been obvious to one skilled in the art to modify Ong's apparatus with Gullicksen's teaching, for the purpose of allowing each node to update its table to accurately reflect the current characteristics of the ring in which the node is connected.

Regarding claims 6 and 12, the combined apparatus of Ong and Gullicksen teach the transmission apparatus as claimed in claims 1 and 7. Gullicksen further teaches a part adding the respective identifier to first of concatenation setting information stored in the storing part and sending the first of concatenation setting information with the respective identifier to another transmission apparatus in response to receiving a predetermined command (col. 9, lines 17-45); and a part receiving second of concatenation setting information from another transmission apparatus, writing respective concatenation setting information into the received second of concatenation setting information, and sending the second of concatenation setting information to another transmission apparatus (col. 10, lines 48-54).

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to RHONDA MURPHY whose telephone number is (571)272-3185. The examiner can normally be reached on Monday - Friday 9:00 - 5:30pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Seema Rao can be reached on (571) 272-3174. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

Rhonda Murphy
Examiner
Art Unit 2462

/R. M./
Examiner, Art Unit 2462

/Donald L Mills/
Primary Examiner, Art Unit 2462